

**Conservation Activity Evaluation Tool** 

CONSERVATION STEWARDSHIP PROGRAM

## CSP-2017-1\_MI - Michigan NIPF\_Associated Ag Land

## **Soil Erosion**

#### **Sheet and Rill Erosion**

Planning Criteria	Planning Criteria Met		
Screening level: Permanent ground cover $> 90\%$ and slope $< 10\%$ . Assessment level: The water erosion rate is $<=$ T.	Yes	No 🗌	
<b>Evaluation Tests</b>	Evaluation 7	Гest Met	
All temporary or permanent rills and gullies are stabilized. All areas expected to have high erosion rates are stable.	Yes	No 🗌	
All non-traffic areas are vegetated.	Yes	No 🗌	
Wind Erosion			
Planning Criteria	Planning Cr	iteria Met	
Screening level: Permanent ground cover $> 90\%$ and slope $< 10\%$ . Assessment level: The wind erosion rate is $<=$ T.	Yes	No 🗌	
<b>Evaluation Tests</b>	<b>Evaluation</b> 7	Γest Met	
All non-traffic areas are vegetated.	Yes	No 🗌	
All temporary or permanent rills and gullies are stabilized. All areas expected to have high erosion rates are stable.	Yes	No 🗌	



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### **Classic Gully Erosion**

	Planning Criteria	Planning Crite	eria Met
	Screening level: Classic gullies are not present. Assessment level: Classic gully management is adequate to stop the progression of head cutting and widening and are offsite impacts are minimized by vegetation and/or structures.	Yes	No
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	st Met
	All temporary or permanent rills and gullies are stabilized. All areas expected to have high erosion rates are stable.	Yes	No
St	reambank, Shoreline, Water Conveyance Channels		
	Planning Criteria	Planning Crite	eria Met
	Screening level: Streams, shoreline or channels are not adjacent to site. Assessment level: For shorelines and water conveyance channels; banks are stable or commensurate with normal geomorphological processes, AND if bank erosion is present, it is beyond the client's control or commensurate with normal geomorphological processes, AND for streambanks, SVAP2 bank condition element score > 5.	Yes	No
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	st Met
	Excluding all fundamentally unstable, natural geomorphic streambanks/shorelines, all streambanks/shorelines on the operation show few signs of erosion or bank failure. Each is stable and protected with natural materials	Yes	No



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# **Soil Quality Degradation**

## **Compaction**

Planning Criteria	Planning Cri	teria Met
Screening level: Soil compaction is not a problem AND activities do not cause soil compaction problems. Assessment level: Compaction is managed to meet client's production and management objectives.	Yes	No
<b>Evaluation Tests</b>	<b>Evaluation T</b>	est Met
Soil compaction is limited to roads and landings. Tree root growth is not impeded. No more than 15 percent of the forested area is devoted to roads, trails, and landings.	Yes	No



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## **Excess Water**

#### <u>Seeps</u>

Planning Criteria	Planning C	riteria Met
Screening level: Excess water from seeps does not cause a problem. Assessment level: Excess water is managed to meet client's objective.	Yes	No
<b>Evaluation Tests</b>	Evaluation	Test Met



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## **Insufficient Water**

#### **Inefficient Moisture Management**

Planning Criteria	Planning Cr	riteria Met
Screening level: Moisture management is not a problem AND activities do not cause inefficient moisture management problems.  Assessment level: Runoff and evapotranspiration levels are minimized to meet client's management objectives.	Yes	No 🗌
<b>Evaluation Tests</b>	<b>Evaluation</b> 7	Гest Met
Management choices include actions to limit moisture loss. For example, maintaining shade, retaining the forest litter layer, and maintaining correct stocking levels.	Yes	No 🗌



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# **Water Quality Degradation**

#### **Nutrients in Surface Water**

	Planning Criteria	Planning Crite	eria Met	
	Screening level: Organic or inorganic nutrients are not applied AND the PLU is not grazed AND there are no confined livestock areas. Assessment level: Nutrients if applied, are based on a soil test, tissue tests or nutrient budget AND conservation practices and managements are in place to minimize surface water impacts.	Yes	No	
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	st Met	
	The land adjacent to a stream, river, or other waterbody on the side or sides you control does: - have diverse, natural plant cover typical to that along streams in your area, - extend from the stream bank/shoreline for a distance of 35 feet or (if applicable) the minimum State buffer-width requirement, whichever is greater, AND - have few places where concentrated runoff flows through.	Yes	No	
	The discharge of surface/subsurface drainage systems are as prescribed by the drainage water management plan.	Yes	No 🗌	
	Livestock access to stream is controlled OR limited to small watering or crossing areas.	Yes	No 🗌	
Excess Pathogens and Chemicals from Manure, Bio-solids or Compost Applications in Surface Water				
	Planning Criteria	Planning Crite	eria Met	
	Screening level: Potential sources of pathogens or pharmaceuticals are not applied on the land. Assessment level: Organic materials are applied, stored, and/or handled to mitigate negative impacts to surface water sources.	Yes	No	
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	st Met	
	Livestock access to stream is controlled OR limited to small watering or crossing areas.	Yes	No 🗌	



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## <u>CSP-2017-1\_MI - Michigan NIPF\_Associated Ag Land</u> <u>Petroleum, Heavy Metal and Other Pollutants Transported to Surface Water</u>

	Planning Criteria	<b>Planning Crit</b>	eria Met
	Screening level: Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants. Assessment level: Petroleum, heavy metals or other potential pollutants are stored and handled to avoid runoff to surface water.	Yes	No
	<b>Evaluation Tests</b>	Evaluation Te	est Met
	The fuel storage area and tank is located: - above the 100-year floodplain, - a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well, and - within a stable place designed to provide secondary containment if the primary means were to fail.	Yes	No
<u>Pe</u>	troleum, Heavy Metal and Other Pollutants Transported t	o Ground W	<u>ater</u>
	Planning Criteria	Planning Crit	eria Met
	Screening level: Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants. Assessment level: Petroleum, heavy metals or other potential pollutants are stored and handled to avoid runoff to groundwater.	Yes	No
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	est Met
	The fuel storage area and tank is located: - above the 100-year floodplain, - a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well, and - within a stable place designed to provide secondary containment if the primary means were to fail.	Yes	No



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#### **Excessive Sediment in Surface Water**

Planning Criteria	Planning Criteria Met	
Screening level: Permanent ground cover > 90% and slope < 10% AND classic gullies are not present AND streams or shoreline are on or adjacent to site. Assessment level: Upslope treatment and b practices address concentrated flows to water bodies AND the SV - bank condition >= 5 AND the livestock and vehicle water cross are stable AND The water erosion rate is <= T AND wind erosion is <= T.	e not outfer VAP2	
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
The land adjacent to a stream, river, or other waterbody on the sides you control does: - have diverse, natural plant cover typical that along streams in your area, - extend from the stream bank/shoreline for a distance of 35 feet or (if applicable) the mini State buffer-width requirement, whichever is greater, AND - have places where concentrated runoff flows through.	to	
All temporary or permanent rills and gullies are stabilized. All are expected to have high erosion rates are stable.	eas Yes No	
<b>Elevated Water Temperature</b>		
Planning Criteria	Planning Criteria Met	
Screening level: Water courses on or adjacent to the site are not designated by a State Agency as a temperature impairment OR w course temperature is not a client concern. Assessment level: The SVAP2 - riparian area quality element score is >= 5 AND the SV - riparian area quantity quality element score is >= 5 AND the SV - canopy cover element score is >= 6, OR existing conservation practices are in place to address water temperature.	e VAP2	
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
More than 50 percent of the water surface is shaded on the length the stream/river you control.	n of Yes No	



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# **Air Quality Impacts**

#### **Emissions of Particulate Matter (PM) and PM Precursors**

Planning Criteria	Planning Crit	teria Met	
Screening level: Activities are not present that contribute to agricultural source PM or PM precursor emissions AND episodes or complaints of emissions of PM (dust, smoke, exhaust, etc.), or chemical drift have not occurred. PM producing activity examples are: Prescribed Burn is conducted, Travel ways unpaved or treated with binding agents, Engines (combustion source), Tillage, Pesticides are applied, Fertilization (manure/ commercial), CAFO/manure management). Assessment level: PM and PM Precursor emmissions are managed to meet client objectives.	Yes	No	
<b>Evaluation Tests</b>	<b>Evaluation T</b>	est Met	
Dust is controlled on all non-vegetated, unpaved travel ways.	Yes	No 🗌	
Hedges or rows of trees/large shrubs are established that reduce and intercept air borne particulate matter.	Yes	No 🗌	



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## **Emissions of Ozone Precursors**

	Planning Criteria	Planning Crite	eria Met
	Screening level: Operations are not present that produce ozone precursor emissions. Ozone precursor producing activities are: Engines (combustion source), Pesticide application, Burning, CAFO/manure management, Fertilization (manure/commercial). Assessment level: Ozone precursor emmissions are managed to meet client objectives.	Yes	No
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	st Met
	Energy-efficient vehicles, equipment, and actions are used to lessen discharges of NOx and SOx. For example, using the minimum level of equipment needed to accomplish the activity, minimizing number of trips into the forest, and leaving woody residue in place if not a fire or pest hazard.	Yes	No
<u>En</u>	nission of Greenhouse Gases (GHGs)		
	Planning Criteria	Planning Crite	eria Met
	Screening level: Activities are not present that produce GHGs emissions. GHG producing activities are: Fertilization(manure/commercial), CAFO/manure management, Engines (combustion source), Tillage, AND GHGs are not regulated in this planning area. Assessment level: Greenhouse gas emmissions are managed to meet client objectives.	Yes	No
	<b>Evaluation Tests</b>	<b>Evaluation Te</b>	st Met
	Energy-efficient vehicles, equipment, and actions are used to lessen discharges of NOx and SOx. For example, using the minimum level of equipment needed to accomplish the activity, minimizing number of trips into the forest, and leaving woody residue in place if not a fire or pest hazard.	Yes	No



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# **Degraded Plant Condition**

### **Inadequate Structure and Composition**

Planning Criteria	Planning Criteria Met			
Screening level: Plant communities support the intended land use a desired ecological functions. Assessment level: Plant communities contain adequate diversity, composition and structure to support desired ecological functions.				
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>			
The current plants provide the desired habitat structure and composition.	Yes No			
Plant growth and cover is managed to develop and maintain habitathelp plant diversity.	t to Yes No			
<b>Excessive Plant Pest Pressure</b>	Excessive Plant Pest Pressure			
Planning Criteria	Planning Criteria Met			
Screening level: Plant productivity is not limited from pest pressure Assessment level: Pest damage to plants are below economic or environmental thresholds or client-identified criteria AND plant pe	ests,			
including noxious and invasive species are managed to meet client objectives.				
including noxious and invasive species are managed to meet client	<b>Evaluation Test Met</b>			
including noxious and invasive species are managed to meet client objectives.				
including noxious and invasive species are managed to meet client objectives.  Evaluation Tests	Evaluation Test Met			



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## <u>CSP-2017-1\_MI - Michigan NIPF\_Associated Ag Land</u> Wildfire Hazard, Excessive Biomass Accumulation

Planning Criteria	Planning Cr	riteria Met
Screening level: Wildfire hazards is not a concern. Assessment level: Fuel loads and fuel ladders are managed to provide defensible space and meet client objectives.	Yes	No 🗌
<b>Evaluation Tests</b>	<b>Evaluation</b> 7	Test Met
Fire risk to sensitive sites are controlled by treatment, removal or modification of vegetation, debris and detritus in a strip or area	Yes	No 🗌



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# Fish and Wildlife - Inadequate Habitat

#### **Inadequate Habitat - Food**

Planning Criteria	Planning Criteria Met	
Assessment level: The WHSI rating is >= 0.5 AND (when surface stream present) the SVAP2 - fish habitat complexity element score is >= 7 AND the SVAP2 - aquatic invertebrate habitat element score is >= 7, OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR food is available in quality and extent to support habitat requirements for the species of interest.	Yes	No
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
Designated areas are planted as food and habitat for pollinators/beneficial insects. For example, planted to nectar and pollen producing plants and protected from disruptionchemical, biological, or mechanical.	Yes	No 🗌
The land adjacent to a stream, river, or other waterbody on the side or sides you control does: - have diverse, natural plant cover typical to that along streams in your area, AND - extend from the stream bank/shoreline for a distance of 35 feet or (if applicable) the minimum State buffer-width requirement, whichever is greater.	Yes	No
Existing plants provide food for the chosen declining, threatened, or endangered wildlife species <see action="" plan="" state="" wildlife=""></see>	Yes	No



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### **Inadequate Habitat - Cover/Shelter**

Planning Criteria	Planning Cri	teria Met
Assessment level: The WHSI rating is >= 0.5 AND (when surface stream present) the SVAP2 - barriers to movement element score is >= 7 AND the SVAP2 - fish habitat complexity element score is >= 7 AND the SVAP2 - aquatic invertebrate habitat element score is >= 7, OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR cover is of available quality and extent to support habitat requirements for the species of interest.	Yes	No
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
The pond/lake, which supports a natural or planted fish population, is managed: -to exclude livestock, -to control nuisance species and undesirable aquatic vegetation controlled, -to complies with state and local regulations when stocking the pond, AND -use of a buffer zone of diverse, natural plant cover at least 35 feet wide.	Yes	No
Livestock access to stream is controlled OR limited to small watering or crossing areas	Yes	No 🗌
All stream banks show few signs of erosion or bank failure. Each is stable and protected with natural materials.	Yes	No 🗌
Plant growth provides cover/shelter that benefits threatened, endagered, or declining wildlife species. <see action="" plan="" state="" wildlife=""></see>	Yes	No 🗌
Designated areas are planted as food and habitat for pollinators/beneficial insects. For example, planted to nectar and pollen producing plants and protected from disruptionchemical, biological, or mechanical	Yes	No



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### **Inadequate Habitat - Water**

Planning Criteria	Planning Cri	teria Met	
Assessment level: The WHSI rating is $>= 0.5$ AND (when surface stream present) the SVAP2 - aquatic invertebrate habitat element score is $>= 7$ , OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR water is available in quality and extent to support habitat requirements for the species of interest.	Yes	No	
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>		
Access to water is at the right height, depth and time of year for wildlife species.	Yes	No	
Changes to water flow for irrigation or otherwise are limited to not alter the stream's usual flow.	Yes	No	



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## CSP-2017-1\_MI - Michigan NIPF\_Associated Ag Land **Inadequate Habitat - Habitat Continuity (Space)**

Planning Criteria	Planning Cri	teria Met
Assessment level: The WHSI rating is >= 0.5 AND (when surface stream present) the SVAP2 - barriers to movement element score is >= 7 AND the SVAP2 - aquatic invertebrate habitat element score is >= 7, OR conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds, OR The connectivity of habitat components are adequate to support stable populations of targeted species.	Yes	No
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
In-stream structures (dam, diversion structure, bridge, culvert, low-water stream crossing, etc.) allow for the upstream/downstream movement of fish and other aquatic animals throughout most of the year.	Yes	No
People, vehicles, equipment, or livestock are only moved across a stream/river at a bridge, culvert, or stabilized ford crossing(s). Travel across the stream/river beyond these crossings is controlled.	Yes	No
Plant growth and cover is managed to develop and maintain habitat to help chosen wildlife species. <see action="" plan="" state="" wildlife=""></see>	Yes	No 🗌
Connectivity between food resources and cover and shelter is provided for the chosen wildlife species. <see action="" plan="" state="" wildlife=""></see>	Yes	No 🗌



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# **Inefficient Energy Use**

### **Equipment and Facilities**

Planning Criteria	<b>Planning Crit</b>	eria Met
Screening level: Client is not interested in improving equipment and facilities energy efficiency. Assessment level: Major components of a USDA approved energy audit have been implemented that address equipment and facilities to meet client objectives OR On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives.	Yes	No
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
Recommendations/components of an energy audit have been applied. The audit addressed equipment and facilities on the farm. For example, energy loss from lighting, drying, refrigeration, heating, or building insulation have been improved.	Yes	No
Renewable energy systems are applied. For example, solar, wind, geothermal, or hydro.	Yes	No



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## <u>CSP-2017-1\_MI - Michigan NIPF\_Associated Ag Land</u> <u>Farming/Ranching Practices and Field Operations</u>

Planning Criteria	Planning Crit	eria Met
Screening level: Client is not interested in improving equipment and facilities energy efficiency. Assessment level: Major components of a USDA approved energy audit have been implemented that address equipment and facilities to meet client objectives OR On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives.	Yes	No
<b>Evaluation Tests</b>	<b>Evaluation Test Met</b>	
Renewable energy systems are applied. For example, solar, wind, geothermal, or hydro.	Yes	No
Recommendations/components of an energy audit have been applied. The audit addressed equipment and facilities on the farm. For example, energy loss from lighting, drying, refrigeration, heating, or building insulation have been improved.	Yes	No